

Title (en)
TARGET MEASUREMENT APPARATUS AND TARGET MEASUREMENT METHOD

Title (de)
ZIELMESSVORRICHTUNG UND ZIELMESSVERFAHREN

Title (fr)
APPAREIL ET PROCÉDÉ DE MESURE DE CIBLE

Publication
EP 3875988 A4 20220803 (EN)

Application
EP 19878424 A 20190924

Priority
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• JP 2019037226 W 20190924

Abstract (en)
[origin: EP3875988A1] A target object measuring device and a method of measuring a target object are provided, which can accurately calculate the size and/or the weight of an underwater target object by utilizing a transducer. The target object measuring device includes a transducer, a target object echo signal extracting module, a peak detecting module, a peak incoming direction calculating module, a time difference calculating module, and a target object measuring module. The transducer transmits a transmission wave underwater and receives a reflection wave. The target object echo signal extracting module extracts an echo signal indicative of a target object from data of the reflection wave. The peak detecting module detects each of a plurality of peaks included in the echo signal. The peak incoming direction calculating module calculates an incoming direction of each of the plurality of peaks based on the reflection wave. The time difference calculating module calculates a time difference between a timing of appearance of a first peak and a second peak different from the first peak, among the plurality of peaks, a difference in the incoming direction between the first peak and the second peak being smaller than a given threshold. The target object measuring module calculates data related to a size and/or a weight of the target object based on the time difference.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
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• [A] US 6325020 B1 20011204 - GUIGNE JACQUES Y [CA], et al
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• [A] ITO MASANORI ET AL: "Target strength spectra of tracked individual fish in schools", FISHERIES SCIENCE, JAPANESE SOCIETY OF SCIENTIFIC FISHERIES, JP, vol. 81, no. 4, 29 May 2015 (2015-05-29), pages 621 - 633, XP035514555, ISSN: 0919-9268, [retrieved on 20150529], DOI: 10.1007/S12562-015-0890-7
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DOCDB simple family (application)
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